

IN THE SPECIFICATION

Please amend the paragraph beginning at line 21 of page 5 as follows:

--The invention disclosed in U.S. Application ~~09/158,730 filed September 22, 1998~~ Patent No. 6,442,221 is directed to an equalizer which overcomes one or more of the above noted problems. According to this invention, a vector domain equalizer 20 as shown in Figure 6 relies on vectors to distribute the transmitted data in both time and frequency so that the vectors are essentially random in the time and frequency domains. Accordingly, in a heavily ghosted channel, all data can be recovered with small noise enhancement, and any enhanced noise that does exist is near white.--

Please amend the paragraph beginning at line 14 of page 8 as follows:

--The invention of U.S. Application ~~09/158,730~~ Patent No. 6,442,221 works quite well. However, the present invention produces similar results but with fewer calculations.-

Please amend the paragraph on page 15, line 13 as follows:

--Accordingly, the pre-processor 112 of the equalizer 110 multiplies the signal received from the channel by the coefficients b. Again, the pre-processor 112 is in effect a modulation operation that modulates the received main signal and its ghost so that the ghost is unequal to the received main signal. Accordingly, the ghost is no longer a 100% ghost. The multiplication results of the pre-processor 112 are transformed to the frequency domain by the Fast Fourier Transform ~~122~~ 118, the multiplier 120 multiplies the frequency domain multiplication results from the Fast Fourier Transform 118 by the complex coefficients A in order to eliminate the ghost from the multiplication results of the pre-processor 112, and the inverse Fast Fourier Transform 122 transforms the ghost-free, frequency domain, modulated received main signal to the time domain. The post-processor 116 multiplies the output from the finite filter 114 by the coefficients c in order to reverse the effects of the modulation imposed by the pre-processor 102 and to apply a window function to the output of the inverse Fast Fourier Transform 122, as described above.--